AfterMath

Vol. 19, No. 1 Texas A&M University-Commerce—Mathematics Department Newsletter FALL 2005

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Whoever despises the high wisdom of mathematics nourishes himself on delusion and will never still the sophistic sciences whose only product is an eternal uproar.
Leonardo da Vinci

Faculty in Motion

Joining the department as *Ad Interim* Instructors of Mathematics are **Heather Burkham** and **Thomas Faulkenberry**. **Heather** is pursuing an EdD in Higher Education Curriculum, Teaching and Supervision; is an August 2005 graduate of our Master's program ("A survey of construction methods for magic squares and a curious conclusion with elliptic curves" was her Math 595 paper); and a May 2001 graduate of our undergraduate math program. She started her mathematics career in Commerce as a chemistry major, enrolling in (noncredit) developmental mathematics—providing her with a perspective that enhances her teaching in the classroom. **Tom** has a master's degree in math from Oklahoma State and a bachelor's degree in math from Southeastern Oklahoma State. He was most recently a graduate student in the math department at the University of North Texas, where he taught math and math education courses and did research in math education and mathematical cognition. He decided to forego the PhD in math and is now a PhD student in psychology at A&M-Commerce, studying cognitive science. While maintaining an active interest in several areas of pure math, his current research interests are in mathematical cognition and mathematical modeling of cognitive processes (i.e., neural networks and artificial intelligence). Tom's hobbies are varied, but heavily weighted towards music and pursuing outdoor activities. Both Heather and Tom have worked in part-time positions with us before and we welcome them as full-time colleagues.

In August, we welcomed our new Administrative Secretary, **Ricia Montgomery**, to the department. Ricia moved to Commerce in January with husband Kent and their three children Ben, Rachel and Sarah (a fourth, sixth and tenth grader). The well-traveled Montgomerys had previously lived in Georgia for ten years, and prior to that lived in Massachusetts (after California and Montana). Welcome, Ricia!

The math department welcomes **Heidi Staebler** back to the department. After spending a final semester at Illinois State University, Heidi returns full-time to A&M-Commerce. She is keeping busy teaching courses for future teachers and finishing her doctoral dissertation ("Problem Posing as a Pedagogical Strategy: A Teacher's Perspective"). In addition, she is planning a wedding for early November—so keep the name Wiseman in mind when you look for Heidi in the future.

In August, **Pam Webster** officially became **Dr. Pamela Webster** upon completion of her EdD dissertation, "The effectiveness of interventions on the pass rate in developmental mathematics courses". Congratulations to Pam! (**Charles Dorsett**'s wife Ruth completed her Master's in Social Work in the same ceremony in August.)

The department also welcomes the following new graduate assistants: **Jodi Laroe** and **Holly Stovall** (who teach Math 131 and assist with supplemental instruction duties) and **Patrick Rose** (who assists with the new calculus recitation sections). Continuing as teaching assistants are **Shannon Kratzmeyer** and **Jane Smith**; **Jahnavi Kundooru** and **Rohit Baxi** are continuing graduate assistants (nonteaching). Continuing as an adjunct this year is **Sandy Johnson** (who holds Bachelor's and Master's math degrees from ETSU). While teaching full time for Paris Junior College, **Jeff Norris** is helping out as an adjunct with one section of College Algebra (Jeff also received Bachelor's and Master's degrees in math in the 1990s from ETSU/A&M-Commerce).

Kay Hatfield, our former administrative secretary, decided to explore the 'housing bubble' and, after a grueling set of Saturday and Sunday classes over several weeks, took her realtor's exam. Kay is now with Keller Williams Realty in Rockwall. Wayne is with the Commerce Police Department, and son Matthew is serving in Afghanistan. Finally, we have sad news to report on two fronts: April saw the passing of **Rachel Lafferty**, benefactor and friend to the department—many, many students have benefited from Ms. Lafferty's kindness to mathematics. And, sadly, former secretary **Sue Smith**'s husband, Joe Paul Smith, passed away in August from injuries sustained in a tractor accident in the spring.

Departmental Grants

The mathematics department has received two more year-long Teacher Quality Professional Development grants from the U.S. Department of Education and the Texas Higher Education Coordinating Board, primarily supporting instructional strategies for middle school mathematics teachers. This is in addition to wrapping up three from last year! Specifically, **Dr. Eileen Faulkenberry** wrapped up an award from last year, and this year received $82,000 for "Concepts and Instructional Strategies for Geometry"; **Tom Faulkenberry** is codirector. Thirty one teachers from 11 districts attended a 3 week summer workshop in Commerce, with monthly follow-ups. Along with instruction in innovative teaching strategies and geometric concepts, the participants received approximately $500 in books, software, and materials

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Departmental Grants—*continued from page 1*

to take back to their classrooms in order to implement the new teaching strategies in geometry that they learned. The participants are exploring ways to give students a more conceptual understanding of the mathematical topics rather than focusing on rote memorization or algorithms. **Dr. Vanessa Huse** finished up the evaluation and reporting for two teacher quality grants for middle school mathematics teachers that were awarded last year. In addition, she began implementing a new one this year (for Algebra I); $82,935 was awarded to assist 20 teachers in 10 school districts from central Texas. Along with instruction in innovative teaching strategies and algebra concepts, each participant received a laptop. Dr. Huse has a separate grant for a workshop sponsored by TI for equipment and training for preservice teachers ($500 for equipment for each participant, November 2 and 3 in Corsicana).

More Faculty-related Updates

Faculty scholarly activity since last year's newsletter included the following. **Dr. Italo Simonelli** submitted "Optimal graphs for chromatic polynomials" (*Discrete Mathematics*), and "Extreme value analysis: model building and parameter estimation" (*J. Applied Statist. Science*) and published "Distribution of multiplicative functions: the symmetric case" (*Ann. Sci. Univ. Budapest, Sectio Comp.* 23) and "Characterization of probability distributions by properties of products of random variables". **Dr. Nikolay Sirakov** submitted several papers for publication since arriving in Commerce, such as "A new active convex hull model for image regions" (*Journal of Mathematical Imaging and Vision*); "The heat equation to 3D surface mesh reconstruction" (to the 2nd Iberian Conference on Pattern Recognition and Image Analysis); and "Geometric heat differential equation with elasticity for medical image segmentation" (*Lecture Notes in Computer Science*, Springer-Verlag). **Dr. Hasan Coskun** published "The well-poised Macdonald functions W_1 and the Jackson coefficients W_1 on BC_n", (in the *Contemporary Mathematics* series, published by the American Mathematical Society), and submitted "On generalizations of Rogers-Ramanujan Identities associated to root systems" (*Advances in Mathematics*). **Dr. Rick Kreminski's new computer** has been doing hundreds of hours of intensive numerical computations related to the Riemann zeta and xi functions. (By contrast, Dr. Kreminski has been spending his evenings pondering torts, contracts, civil procedure, criminal law, patents, property and business enterprise.)

John Davenport "bit the bullet" and followed his doctor's advice, and had knee replacement surgery on his left knee in January (for symmetry purposes, i.e. so as to complement Dale Bedgood's 2004 surgery for his right knee). John recently relocated to Rockwall and now experiences the joys of 5-days-per-week commuting. He, **Hasan Coskun** and **Lymeda Singleton** occasionally car-pool from Rockwall. Lymeda presented two sessions of "Transforming Motion Geometry for Grades 6-12" at CAMT (Conference for Advancement of Mathematics Teaching) in July in Dallas. **Stuart Anderson** also attended CAMT, presented a paper, and represented the Mathematical Association of America (MAA) Texas Section. **Eileen Faulkenberry** and **Pam Webster** also attended and took over sixty participants of their collective grants and **Vanessa Huse** had 26 students attending from her grants. CAMT will be held again July 20-22, 2006 in Houston, Texas. Speaking of the MAA, on April 15th, with officers of the national MAA looking on, **Stuart Anderson** was recognized for his outstanding service to the Texas Section with a special award culminating in a standing ovation in the packed ballroom at UT-Arlington, The next day **Italo Simonelli** delivered his invited teaching award talk titled "Teaching: A process or an algorithm?" **Dr. Bill Aslan** (who first arrived in Commerce in 1967) continues to talk about retirement, as something that may happen. It may just be a coincidence, but he recently generously endowed a new scholarship for the department, the Bill, Gloria and James Aslan scholarship. **John Heath** recently celebrated 30 (!) years of service at A&M-Commerce. Besides teaching thousands of students, John has coached thousands of kids—and adults acting like kids. John coached his son, Alex, and Commerce ISD Superintendent Keith Boles, among others, to a runner-up position in campus intramural softball this past spring.

Mathematics Clubs and Student Highlights

Pam Webster continues to oversee the Math Skills Center and the math clubs. In April, the Texas Section of the MAA had its first annual Calculus Bowl for undergraduate students. A&M-Commerce sent a team, consisting of **Tanya Chase**, **Holly Stovall**, **Sarah Muehlenbein**, and **Caleb Grisham**. While competing against teams from almost every major university in Texas, our team performed very well and, although they seemed to be somewhat of the underdogs, they walked away with **bronze** medals! We are very proud of them. Other activities for the year included our monthly meetings,a volleyball and barbeque social, and the annual Christmas dinner.

Alumni Updates

Please drop us a line to let us know how you're doing! We met up with **Donna Asbill** at last fall's breakfast, but she also had sent in the following update: Donna (formerly Donna Vititow Mynatt) was head of the math department at Rains Junior High, having taught there for 18 years. Eldest son Bradley was majoring in electrical engineering at A& M (College Station), and son Chris was a seventh grader. She recently married her high school sweetheart, Leon Asbill (also an ETSU alumnus) and was "living a wonderful and peaceful life in rural Rains County". **Julie White** works with engineers at Hunt Petroleum in a high-rise in downtown Dallas and loves her job. **Lucas Vaclavik** continues graduate work in Applied Mathematics at the University of Maryland (College Park), having dropped by for a visit in Commerce after a summer in his native Romania. Alumni: send us your news!

Previously Retired Faculty

Dr. Dale Bedgood and Betty were presented with their first grandchild October 19, 2004. Scott and his growing family live in Flower Mound. The Bedgoods got to visit Hawaii in January, then southeast Asia in March and April (Thailand, China, S. Korea, and Japan), including walking up part of the Great Wall. If that's not enough, in June, Betty and Dale took a vacation to Yellowstone National Park. **Dr. Jack Lamb** reports that he's been busy maintaining web sites he wrote for the Belton Lions Club, FUMC Belton, Family Outreach and The Wok Chinese restaurant. He and Mildred are planning to take a cruise from October 30th to November 12th to see the Panama Canal and points in between. They had a nice vacation with Brenda and Margaret and their kids in August. **Dr. Archie Brock** has been spending a good deal of time in a small woodworking shop, having recently invested in a wood lathe and currently having fun turning out some wooden bowls and wooden "glasses". He and Lela's three daughters (and four grandchildren) are now all located in the Metroplex area so they are able to see them. Archie would be happy to have you call or send email (903.886.7160, broc@boisdarc.tamu-commerce.edu). **Dr. Vance Underhill** has been retired for a little more than a year and thoroughly enjoying it, playing tennis and taking care of a big yard. He has taken two major trips, the first to the Canadian Maritime Provinces (Nova Scotia, Prince Edward Island, and New Brunswick), the second was to the Canadian Rockies plus Vancouver and Victoria. His new Canon digital camera is also getting a lot of use. He visits his daughter and son-in-law in Dallas a couple of times a month. And says he enjoys the third Wednesday of each month (when Social Security checks are issued).

Dr. Howard Lambert and Frieda are definitely enjoying retirement. They, too, travel quite a bit, each summer taking a four to seven week camping trip to Montana where their son and his wife live, and take several shorter outings to camp with their daughter and granddaughters.

Foundation and Scholarship news

The department continues to assist Janet Scott and Bill McAfee (class of 1938!) in hosting a regional Texas Math and Sciences Coaches Association math competition once a year, every January, on our campus. Net proceeds from the TMSCA event go directly into the William C. McAfee Mathematics Fund, which will be used to support department faculty in professional development projects.

Scholarships, created from and sustained by generous contributions of alumni and other friends of the mathematics department, have benefited uncountably many mathematics students over the years. Current (Fall 2005) students now being supported are:

- Caleb Grisham, the **Cecil B. Wright Scholarship** for upper-level undergraduate students
- Sarah Muehlenbein, the **W.W. "Bub" Taylor Scholarship** for mid-level students
- William Johnston, the **Hoyle & Ann Oglesby Julian Scholarship**, for beginning students
- Charleen Townsend, the **Dale & Betty Bedgood Scholarship**, unrestricted
- Alaina Gillick, Mark Ellerman, and Zachery Mikeska, the **Rachel Lafferty Scholar Award**
- Caleb Grisham and William Johnston also are **Lafferty Excellence** honorees.

The **John and Elaine Yznaga Scholarship** will be used for recruitment of top high school prospects this fall.

If you wish to make contributions to any of these funds, you may call the Department at 903.886.5157 or the A&M-Commerce Foundation at 903.886.5712

Parting problem 2^n and 5^n generally do not begin with the same digits. The smallest n for which this occurs is n=5, since 32 and 3125 both lead with a '3'. Eventually there is an n for which the leading two digits of 2^n and 5^n match. What are those common leading digits? (And eventually the first three digits match; what are those common leading digits?)

The annual joint meetings of the MAA and AMS will be held January 12-15, 2006, Henry B. Gonzalez Convention Center in San Antonio, Texas (www.maa.org). The Texas Section of the MAA meets March 30-April 1, 2006, at Midwestern State University, Wichita Falls, Texas.

Let Us Hear From You

We would like to hear from all of our former students. Whether you used slide rules or calculators in the classroom, attended ET or A&M-Commerce, we are interested in what has happened in your life since you left campus. If you have a story about a favorite professor, we would like to hear that too. Please fill out the form below and return it to the Math Department so your information can be included in the next *Aftermath Newsletter*.

Name: _____

Address (for our files): _____

_____

City, State & Zip: _____

_____

Degree: _____

Year Graduated: _____

Email address: _____

Please list any promotions, career changes, achievements, awards, or personal news that you would like to share:

Send to the address below, or via email to
Richard_Kreminski@tamu-commerce.edu

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Homecoming Brunch

This year, for homecoming, we're trying something different: brunch instead of breakfast. As a second experiment, we are changing the price: FREE to alumni, guests and special friends (if you RSVP). Brunch will be served 10:30am-11:30am. We hope you can attend! If so, please clip this out and send it to the address below, or send us email.

Name: _____

Address (for our files): _____

_____

City, State & Zip: _____

E-Mail Address: _____

Please reserve _____ places at the Homecoming Brunch on October 22, The Bluebonnet Room, Memorial Student Center, 10:30 a.m.-11:30 a.m.

Please return to:

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or via email to ***Richard_Kreminski@tamu-commerce.edu***